

1994 TRIP GENERATION WORKSHEET - Page 2 of 3

TABLE 1- Rural Trip Generation				TABLE 2 - City Trip Generation				TOTAL
Traffic Zone	# Houses outside City Limits		# Trips Gen. 1994	Traffic Zone	Whiteville/Brunswick 1994 Population		# Trips Gen. 1994	# DU Trips
	1987 (Hc)	1994 (He)	(TP _{Prur})		% (ZPOP%)	# (ZPOP#)	(TP _{Pcty})	(TP _{Du})
I	331	394	2,757	I	0.0	0	0	2,757
II	306	364	2,549	II	1.5	90	263	2,811
III	480	571	3,998	III	3.5	210	613	4,611
IV	0	0	0	IV	19.0	1,140	3,325	3,325
V	44	52	367	V	12.0	720	2,100	2,467
VI	0	0	0	VI	17.0	1,020	2,975	2,975
VII	4	5	33	VII	24.0	1,440	4,200	4,233
VIII	0	0	0	VIII	5.0	300	875	875
IX	11	13	92	IX	11.0	660	1,925	2,017
X	217	258	1,808	X	7.0	420	1,225	3,033
Totals:	1,393	1,658	11,604	Totals:	100.0	6,000	17,500	29,104

Hc = 1987 Houses counted on quad map (inside planning area, but outside city limits).

He = 1994 Houses estimated = (Hc * GR)

ZPOP% = estimated % of city population within each zone.

ZPOP# = amount of city population within each zone = ([ZPOP%/100] * POP)

TP_{Pcty} = City generated trips = ([ZPOP#/PDU] * DUTG).

TP_{Du} = (TP_{Prur} + TP_{Pcty})

Total # DU Trips (TP_{Du}): 29,104

COMMERCIAL TRIPS

1994 Commercial Trip Generation Factor (CG): 0.14

Commercial (TP_{com}) = # of commercial trips gen. = (TP_{Du} * CG).

Trips (TP_{com}) The 1994 Comm. Trip Gen. Factor was taken from Tech. Report 11, Table 1, using
4,075 Ahoskie as the closest match to Whiteville, then adjusted per KDH.

Total # of Internal Trips by Pop. & Development (TP_{in}): 33,178

TP_{in} = (TP_{Du} + TP_{com}).

Step 2: Internal trips are calculated. We can now calculate the number of internal trips with external destinations. The number of trips that stay in the planning area is in direct proportion to the number of employers inside the planning area compared with population. The Employment/Population Reduction Factor (EPR) is estimated using employment/population ratio and borrowed data from older studies. The EPR is multiplied by the total number of internal trips generated by Population & Development. The result is the number of internal trips which stay inside the planning area (II). The remainder trips have external destinations (IE).